

Antelope Fire Management Unit

The Antelope FMU is a total of 39,845 acres. This FMU is entirely within the Klamath National Forest boundary. The Forest has primary protection responsibility.

Protection Responsibility	Acres	Percent of FMU
KNF	39,845	100%
Wildland Urban Interface	Acres	Percent of FMU
Community @ Risk	101	<1%
Defense Zone	1,226	3%
Threat Zone	8,051	20%

3.2.2 Guidance

LMP guidance specific to Management Areas found in the FMU are listed below.

Management Area	Acres	Percent of FMU
LSR	543	1%
RNA/SIA/CUA	129	<1%
Forage	5,594	14%
Riparian Reserves	1,402	4%
Partial Retention	2,226	6%
Winter Range	1,939	5%
General Forest	16,290	41%
No Data	130	<1%
Private (may include BLM) inside FS boundary	11,578	29%

Research Natural Areas

A portion of the Antelope Creek Lakes RNA is located in the southwest corner of this FMU. This RNA represents a subalpine wet meadow habitat type.

Description

Research Natural Areas are examples of important vegetative, aquatic, and geologic ecosystems of scientific interest and importance, and serve as a baseline for comparing ecological changes. Conditions have developed with little or no influence from human activities. They are managed to preserve naturally functioning plant and animal communities. A network of RNAs has been established nationally.

Management Goals

Manage RNAs for the “maintenance of unmodified conditions and natural ecological processes” (FSM 4063.3).

Preclude impacts from human activities that would modify the value of the RNA. This is to maintain the area's value as a significant contribution to the Forest's biological and physical diversity and also as a gene pool for plant and animal species.

Promote and use RNAs for non-manipulative research and baseline or control sites for Forest management comparisons. Form partnerships with university and research communities.

Desired Future Condition

RNAs exist as examples of healthy ecological communities. Human influences are minimal. Management actions such as prescribed fire may be permitted if they further the management goals of the RNA. Non-manipulative research, monitoring and educational activities are ongoing within RNAs. Knowledge and information gained from RNA studies are incorporated into Forest management.

Fire Management Standards and Guides

MA1-19 Extinguish, as quickly as possible, all human-caused wildfires that endanger the values for which the RNA was established. Use "light hand" fire suppression tactics that cause the least amount of soil disturbance in the area. Allow fires to burn if they are within a prescription designated to accomplish objectives of the specific RNA as prescribed in the RNA implementation schedule.

Implementation schedules should address the sensitivity of each RNA to fire and establish specific guidelines for its use or control. Fire may be used to preserve a vegetative type when thought necessary in the implementation schedule.

MA1-20 Rehabilitate all suppression-related ground disturbance within a RNA using techniques appropriate to overall management goals of the RNA.

Threatened & Endangered Species Habitat

There are four Northern Spotted Owl activity centers located in this FMU.

Management Goals

Provide habitat conditions and management activities that contribute to the recovery of Federally listed T&E species and to Sensitive species found on the Forest. Emphasize the recovery of each species, by managing for quality habitat, consistent with ecological processes.

Meet the habitat requirements as outlined in the *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* signed April 13, 1994 and the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* dated February 1994 (FSEIS).

Late Successional Reserves**Description**

LSRs have been designated based on 5 elements: (1) areas mapped as part of an interacting reserve system; (2) Late-successional/Old Growth 1 and 2 areas within Marbled Murrelet Zone 1 and certain owl additions, mapped by the Scientific Panel on Late-Successional Forest Ecosystems (1991); (3) sites occupied by marbled murrelets; (4) known owl activity centers; and (5) Protection Buffers for specific endemic species identified by the Scientific Analysis Team (1993). Additional areas may be included as species are identified as provided for in the survey and management standards and guidelines.

Management Goals

The objective of LSRs is to protect and enhance conditions of late-successional and "old growth" forest ecosystems, which serve as habitat for late-successional and "old growth"-related species including the northern spotted owl. These reserves are designed to maintain a functional, interacting, late-successional and "old growth" forest ecosystem.

Desired Future Condition

The characteristics of individual areas vary according to the dominant vegetative species, site class, topography and other site factors. Well-dispersed and continuous areas of multi-layered forests with high quality habitat characteristics and attributes are common: (1) under optimum conditions on north slopes, (2) at high elevations, and (3) in cool, moist areas. The overstory trees are large diameter, tall and have obvious signs of decadence. Some are broken-topped, have mistletoe, or have platforms of branches capable of holding organic materials that serve as a nest. Snags are common and fallen trees visible on the ground, providing for adequate prey populations. Within true fir habitats or where hardwoods occur, mid-seral stage forested areas provide suitable habitat as well. Although overstory trees are smaller and stands are less dense, important structural elements, such as snags and nesting platforms, are present. South slopes and drier areas are more open due to frequent natural fires.

Exceptions

RNAs and activities required by recovery plans for listed T&E species take precedence over LSR standards and guidelines.

Management Assessment for Late-Successional Reserves

Management assessments have been completed for LSRs and 100-acre LSRs throughout the Forest. These LSR assessments include: (1) a history and inventory of overall vegetative conditions within the reserve, (2) a list of identified late-successional associated species known to exist within the LSR and information on their locations, (3) a history and description of current land uses within the reserve, (4) a fire management plan, (5) criteria for developing appropriate treatments, (6) identification of specific areas that could be treated under those criteria, (7) a proposed implementation schedule tiered to higher order (for example, larger scale) plans, and (8) proposed monitoring and evaluation components to help evaluate if future activities are carried out as intended and achieve desired results. The Regional Ecosystem Office (REO) has reviewed these LSR assessments. Activities that have been reviewed by the REO have been prioritized for each LSR. LSRs have also been prioritized by activity needs. Refer to the Forest-wide LSR assessment, Taylor, Dillon, Crapo/Little North Fork, and Goosenest LSR assessments. Also, refer to Appendix K, LSR Fire Management Plan, located at the end of this document.

Standards and Guidelines

MA5-35 Each LSR will be included in fire management planning as part of watershed analysis. Fire suppression in LSRs will utilize minimum impact suppression methods in accordance with guidelines for reducing risks of large-scale disturbances. Plans for wildfire suppression will emphasize maintaining late-successional habitat. During actual fire suppression activities, fire managers will consult with resource specialists (for example, botanists, fisheries and wildlife biologists, hydrologists) familiar with

- the area, these standards and guidelines and their objectives, to assure that habitat damage is minimized. Until a fire management plan is completed for LSRs, suppress wildfire to avoid loss of habitat in order to maintain future management options.
- MA5-36 In LSRs, a specific fire management plan will be prepared prior to any habitat manipulation activities. This plan, prepared during watershed analysis or as an element of province-level planning or a LSR assessment, should specify how hazard reduction and other prescribed fire applications will meet the objectives of the LSR. Until the plan is approved, proposed activities will be subject to review by REO. REO may develop additional guidelines that would exempt some activities from review. In all LSRs, watershed analysis will provide information to determine the amount of CWD to be retained when applying prescribed fire.
- MA5-37 In LSRs, the goal of wildfire suppression is to limit the size of all fires. When watershed analysis, province-level planning, or a LSR assessment is completed, some natural fires may be allowed to burn under prescribed conditions. Rapidly extinguishing smoldering CWD and duff should be considered to preserve these ecosystem elements.
- MA5-38 Utilize an aggressive prescribed fire program to maintain long-term habitat quality and ecological processes within LSRs once LSR assessments and National Environmental Protection Act (NEPA) analysis are completed and site-specific decisions are made. Specific fire prescriptions shall be used until PNF can be effectively used. The use of PNF is outlined in the Wilderness Fire Management S&Gs. Those S&Gs also shall apply to LSRs.
- MA5-39 Report wildfires within activity centers to the appropriate District and/or Forest biologist. The biologist shall determine the need to contact the USFWS. Report fires that escape initial attack to the USFWS. Motorized and heavy equipment may be permitted by the Incident Commander to assure habitat protection.
- MA5-40 Wildfire prevention should be critical to habitat maintenance. During critical fire danger periods, increased prevention efforts should be undertaken, especially in high use recreation areas within LSRs and in areas adjacent to populated areas.

Winter Range

Description

Located entirely on the Goosenest Ranger District, this 82,900 acre management area encompasses areas identified by the CDFG as important mule deer and pronghorn habitat. Elk habitat within this area occurs west of Highway 97. This management area includes areas supporting grasses, grass-like plants, forbs, and shrubs in various ecological states. Both forested and non-forested sites occur in the area and provide forage and habitat for deer, pronghorn, and domestic ungulates. Much of the area is marginal for timber production. Intensive range management practices and structural improvements have been used to optimize forage production on these lands. Depending on forage conditions and weather

patterns, the use of this area and adjacent management areas by big game will vary. Wild horses occupy a portion of this area.

Management Goals

Improve habitat for deer, elk, and pronghorn. Manage to provide high quality habitat as described in the Mule Deer, Elk and Pronghorn Habitat Capability Models (refer to Appendix I of the EIS). Livestock management actions within the area should be designed to maintain or enhance deer and pronghorn habitat as described in the habitat capability models. Consult with CDFG on herd objectives and wildlife use patterns within the area.

Desired Future Condition

Most of the area consists of well-distributed, patchy mosaics of big game cover and forage habitat. Browse species, particularly bitterbrush and mountain mahogany, are maintained in a young, vigorously growing condition providing high quality nutrition for wintering big game. Ultimately 50 to 80% of the area provides foraging opportunities. Openings in the forest occur so the interior of the opening is no more than 300 yards from an edge of the unit. Pronghorn use openings.

Water sources are available and well-dispersed.

Domestic livestock use the area at sustainable levels. Big game winter forage and cover for deer, elk, and pronghorn is plentiful.

Big game cover provides protection against winter weather, predation and reduces the effects of human-caused disturbances, especially from vehicle traffic. Hiding cover is provided along human travel routes. Vehicle traffic is limited at certain times of the year. Ponderosa pine vegetation in many different stages of development and with varying canopy closures provides hiding and thermal cover for wildlife.

Pronghorn habitat is more open than mule deer areas, with less than 40% canopy closure. Forbs and grasses are abundant and support expanding antelope herds during the spring and summer.

Standards and Guidelines

MA14-20 Prescribed fire may be used to reduce fuel build-ups, improve the vigor and production of forage species and to maintain conditions within stands, conducive to animal movement.

Partial Retention Visual Quality Objective

Description

This prescription applies to those areas identified with a Partial Retention VQO. It encompasses 188,500 acres. Refer to the Forest VQO map (in the Final EIS map packet). These areas typically are either in the foreground of moderate visual sensitivity roads, trails, etc., or the middleground of high sensitivity roads.

Scattered throughout the Forest, these areas are primarily in the middle distances (1/2 to 3 miles) from selected roads and trails.

Management Goal

Provide an attractive, forested landscape where management activities remain visually subordinate to the character of the landscape. Manage human activities so they are subordinate to the character of the landscape.

Maintain stand health as well as resilience to wildland fire, insect, disease, and other damage.

Desired Future Condition

Areas managed to meet a Partial Retention VQO may show evidence of management activities but are visually subordinate to the characteristic landscape in form, line, color, or texture of landscape elements. Views from visually important roads and trails appear forested and provide a nearly natural looking landscape.

Lands capable of growing coniferous vegetation are forested.

Standards and Guidelines

MA15-15 Use prescribed fire to reduce natural fuel buildups, to treat post harvest fuels and to influence vegetative development or composition when there is no market for the slash or down wood.

MA15-16 Design fuelbreaks to mimic the natural characteristics of the area. On steep ground, design units that are operationally feasible and effective to treat fuels.

Forage**Description**

Located entirely on the eastern portion of the Goosenest Ranger District, the 54,700 acre Forage Management Area encompasses areas identified by CDFG as transitory mule deer habitat. CDFG has also identified a portion of this area as being important habitat for pronghorn. This management area includes areas supporting grasses, grass-like plants, forbs, and shrubs. Both forested and non-forested sites occur in the area and provide forage and habitat for deer, pronghorn, and domestic ungulates. Much of the area has marginal timber productivity. Intensive range management practices and structural improvements have been used to optimize forage production on these lands. Depending on forage conditions and weather patterns, the use of this area and adjacent management areas by big game will vary. Wild horses occupy a portion of this area.

Management Goals

Improve habitat for deer and pronghorn. Manage to provide high quality habitat as described in the Mule Deer and Pronghorn Habitat Capability Models (refer to Appendix I of the EIS), commensurate with the time of use by deer. Livestock management actions within the area should be designed to maintain or enhance deer and pronghorn habitat as described in the habitat capability models. Consult with CDFG on herd population objectives and wildlife use patterns within the area. Maintain ecosystem health.

Desired Future Condition

Most of the area consists of well-distributed, patchy mosaics of vegetation suitable for big game cover and forage habitat. Browse species, particularly bitterbrush and mountain mahogany, are vigorously growing in varying age classes and provide high quality nutrition for

big game. Ultimately, 50 to 80% of the area provides foraging opportunities. Pronghorn use openings. Water sources are available and well-dispersed.

Domestic livestock use the area. Forage utilization levels provide the optimum level of forage and cover for deer and pronghorn.

Big game cover is sufficient and provides protection against weather, predation and reduces the effects of human-caused disturbances, especially from vehicle traffic. Continuous hiding cover along human travel routes is maintained where potential exists. Vehicle traffic is limited at certain times of the year. Relatively dense canopies in ponderosa pine, or mixed conifer stands of various ages, provide for wildlife hiding and thermal cover. Vegetation is thrifty, vigorous and resilient to environmental factors, such as wildland fires and insect and disease attacks.

Pronghorn habitat is more open than mule deer areas with less than 40% canopy closure. Abundant forbs and grasses support expanding pronghorn herds during the spring and summer.

Standards and Guidelines

MA16-21 Prescribed fire may be used to reduce fuel buildups, improve the vigor and production of forage species and to maintain conditions within stands, conducive to animal movement.

General Forest

Description

Scattered throughout the Forest, these areas make up about 11% (262,000 acres) of the Forest land base. They are lands that are capable, available, and suitable to be managed for a host of resource conditions, including structural component and commercial outputs. They currently support a variety of vegetation including shrubs, hardwood species, and various tree species in varying sizes and densities. They are areas where timber outputs, consistent with Forest-wide management goals, are of a high priority.

Management Goals

Provide a programmed, non-declining flow of timber products, sustainable through time. These levels may vary from year to year, based on ecological processes. Maintain conifer stocking levels and high growth rates commensurate with the capability of the site to produce wood fiber. Intensively manage young regenerated stands to maximize growth potential.

Maintain stand health, as well as resilience to wildland fire, insect, disease, and other damage. Emphasize salvage and restoration from catastrophic events. Reforest capable, but currently non-stocked, lands.

Emulate ecological processes and stand and landscape patterns where possible. Within harvest units, maintain appropriate structure, composition, and ecological functioning of the area.

Provide for snags and hardwood habitat to help maintain viable populations of wildlife species that require these structural components.

Meet the VQOs. Achieve less modified visual conditions when possible.

Develop a transportation system to transport Forest commodities efficiently to available markets.

Where possible, adjust planting levels to reduce pre-commercial thinning and fuel hazard costs in the future.

Desired Future Condition

The mosaic of healthy forest stands is comprised of a variety of vegetative species. The composition of individual stands varies considerably depending on forest type and seral stage development. Although openings with hardwoods, shrubs, grasses, and forbs are apparent, forest stands consist primarily of conifers. In some areas, the conifer component of the vegetation is sparse (due to vegetative manipulations or natural conditions). All areas maintain some structural components of older stands. Some areas support mature forest stands. The oldest stands are between 80 and 120 years old. Generally, this portion of the forest has younger trees than the surrounding areas. Stand sizes vary with topography and the landscape pattern of surrounding areas.

Regeneration openings have clumps of green trees on at least 15% of the area. Existing seed tree and shelterwood stands retain their residual trees (3 to 12 trees/acre) for structural diversity.

Stocking control maintains healthy, vigorously growing stands.

Reforestation, timber harvesting, and stand tending activities are commonplace. A network of roads provides access throughout these areas.

Habitat for species, which use early and mid-seral stages, is abundant.

Standards and Guidelines

MA17-15 Use prescribed fire to reduce natural fuel buildups, to treat post harvest fuels and to influence vegetative development or composition when there is no market for the slash or down wood.

MA17-16 Design fuelbreaks to mimic the natural characteristics of the area. On steep ground, design units that are operationally feasible and effective to treat fuels.

Goosenest Adaptive Management Area

The southern portion of the FMU is part of the Goosenest AMA. This includes all land allocations except winter range and forage designations.

Description

The Goosenest Adaptive Management Area (AMA) is located on the eastside of the Forest (161,500 acres). AMAs are landscape units designated to encourage the development and testing of technical and social approaches to achieving desired ecological, economic, and other social objectives.

The purpose is to explore localized approaches that may achieve the conservation objectives. These approaches rely on the experience and ingenuity of resource managers and communities

rather than traditionally derived and tightly prescriptive approaches that are generally applied in management of forests.

Monitoring is essential to the success of any plan and to an adaptive management program. Hence, development and demonstration of monitoring and training of the workforce are technical challenges and should be emphasized.

Management Goals

The overall objective is to learn how to manage on an ecosystem basis in terms of both technical and social challenges, and in a manner consistent with applicable laws.

The primary technical objectives of the AMAs are development, demonstration, implementation and evaluation of monitoring programs and innovative management practices that integrate ecological and economic values. (Refer to Attachment A of the ROD for FSEIS for a partial listing of technical topics.)

The primary social objective of AMAs is the provision of flexible experimentation with policies and management.

The specific goal for the Goosenest AMA is the development of ecosystem management approaches including use of prescribed burning and other silvicultural techniques for management of pine forests, including objectives related to forest health, production and maintenance of late-successional forest and riparian habitat, and commercial timber production.

The AMA is intended to contribute substantially to the achievement of well-distributed late-successional habitat outside of reserves, retention of key structural elements of late-successional forest on lands subjected to regeneration harvest, and restoration and protection of riparian zones as well as provision of a stable timber supply.

Desired Future Condition

The desired future condition for the AMA will be determined through the adaptive management process.

Hierarchy of Standards and Guidelines

Management activities in the AMA will be conducted to achieve the objectives described in the Forest Plan. Standards and guidelines for LSRs must be followed when they occur within AMAs and management around these areas will be designed to reduce risk of natural disturbances. Unmapped LSRs are specified for spotted owl activity centers and for certain Protection Buffers.

Flexibility is provided to meet objectives for RRs. Standards and guidelines of the Forest Plan need to be considered during planning and implementation of activities within AMAs and they may be modified in AMA plans based on site-specific analysis. Otherwise, standards and guidelines are to be developed to meet the objectives of the AMA and the overall strategy. Coordination with the REO through the Regional Interagency Executive Committee is required.

Standards and Guidelines

AMA-11 Actively explore and support opportunities to research the role and effects of fire management on ecosystem functions. Cooperation across agency and ownership boundaries should be emphasized.

- AMA-12 Standards and guidelines in the Forest Plan for hazard reduction should be followed until approved AMA plans are established. Fire management experts will participate on the local Interdisciplinary Technical Advisory Panel on all AMAs.
- AMA-13 While management of AMAs is intended to be innovative and experimental, wildfire suppression actions should use accepted strategies and tactics, and conform to specific agency policy.
- AMA-14 Site treatments should be prescribed, which will minimize intensive burning, unless appropriate for certain specific habitats, communities or stand conditions. Prescribed fires should be planned to minimize the consumption of litter and CWD.

3.2.3 FMU Characteristics

Completion of this section is ongoing

Agency Administrator for FMU and major stake holders

- The FMU Agency Administrator is the Goosenest District Ranger
- Land Ownership/ Contact Info:

Goosenest Ranger District- District Fire Management Officer Mike Powell (530) 398-5701

Fruit Growers- Terry Salvestro (530) 475-3453 (ext 117)

3.2.3.1 Safety

Fiber Optics Lines

Power Lines

Poor radio coverage in upper Antelope drainage

Rapid moving water in during spring run off

Stay on main road systems during spring time do to soft soils

Lodge pole stands have a heavy dead down component

Bug mortality

Collapsed Lava tubes

3.2.3.2 Physical

3.2.3.3 Biological

Sensitive Species:

The Goosenest is home and migratory range for a wide variety of sensitive species. It is important to coordinate with local Wildlife Biologist to find out areas of concern within the FMU. Please contact Christy Cheyne at the Goosenest District Office (530)398-5791. A list of some of the species identified within this FMU is listed below:

- Goshawk
- Bald Eagle
- Long Toed Salamander
- Burrowing Owls
- Spotted Owl
- American Marten

3.2.3.4 Resources

Wildland Urban Interface:

Structures are scattered within this FMU and have been assessed by local fire prevention. A structure map may be obtained from the Goosenest Ranger District Fire Management. Within this plan the structures have been clustered into geographic areas due to the high number. For more information on these areas please contact the Fire Prevention Battalion at (530) 398-5725. Areas are listed below:

June Creek Cabins

Antelope Creek ranch

Tennant

Garner Ranch

Antelope Sink

Cultural and Historic:

The Goosenest has a high volume of cultural and historic sites within the FMU. Pay special consideration to areas along Antelope Creek. Please take extra precaution in any area of this FMU. Please contact Jeanne Geotz (530)398-5742 at the Goosenest Ranger District for further information.

Public use: There are numerous disperse all along the Antelope Creek drainage. It is a very active mushroom picking area and a popular area for hunting camps.

Grazing Allotments:

Allotment:	Permittee:	Acres	Location	Season of Use:
Red Rock	Larry Criss, Russell and Roberta Criss	17791	LaHonda/Cedar Well	5/16 to 8/31

3.2.4 FMU Fire Environment

Completion of this section is ongoing

3.2.4.1 Fire Behavior

3.2.4.2 Weather

Watch for eddy effect around Buttes within the valley